comprises an amino acid sequence of SEQ ID NO:14; and A1-LCDR3 comprises an amino acid sequence of SEQ ID NO:16.

29. The bispecific antigen-binding molecule of claim **1**, wherein the first antigen-binding domain that specifically binds human APLP2 comprises the heavy and light chain CDRs of a HCVR/LCVR amino acid sequence pair selected from the group consisting of: SEQ ID NOs: 26/10, 34/10, and 42/10.

30. The bispecific antigen-binding molecule of claim **1**, wherein the first antigen-binding domain that specifically binds human APLP2 comprises three heavy chain complementarity determining regions (A1-HCDR1, A1-HCDR2 and A1-HCDR3) and three light chain complementarity determining regions (A1-LCDR1, A1-LCDR2 and A1-LCDR3), and wherein the second antigen-binding domain that specifically binds human HER2 comprises three heavy chain complementarity determining regions (A2-HCDR1, A2-HCDR2 and A2-HCDR3) and three light chain complementarity determining regions (A2-LCDR1, A2-LCDR2 and A2-LCDR3);

wherein A1-HCDR1 comprises an amino acid sequence selected from the group consisting of SEQ ID NOs: 28, 36 and 44; A1-HCDR2 comprises an amino acid sequence selected from the group consisting of SEQ ID NOs: 30, 38, and 46; A1-HCDR3 comprises an amino acid sequence selected from the group consisting of SEQ ID NOs32, 40, and 48; A1-LCDR1 comprises an amino acid sequence of SEQ ID NO: 12; A1-LCDR2 comprises an amino acid sequence of SEQ ID NO: 14; and A1-LCDR3 comprises an amino acid sequence of SEQ ID NO: 16; and

wherein A2-HCDR1 comprises an amino acid sequence of SEQ ID NO:20; A2-HCDR2 comprises an amino acid sequence of SEQ ID NO:22; A2-HCDR3 comprises an amino acid sequence of SEQ ID NO:24; A2-LCDR1 comprises an amino acid sequence of SEQ ID NO:12; A2-LCDR2 comprises an amino acid sequence of SEQ ID NO:14; and A2-LCDR3 comprises an amino acid sequence of SEQ ID NO:16.

31. The bispecific antigen-binding molecule of claim **1**, wherein the first antigen-binding domain that specifically binds human APLP2 comprises a HCVR comprising HCDR1-HCDR2-HCDR3 having the amino acid sequences of SEQ ID NOs: 36-38-30.

32. The bispecific antigen-binding molecule of claim **1**, wherein the second antigen-binding domain competes for binding to human HER2 with a reference antigen-binding protein comprising three heavy chain complementarity determining regions (A2-HCDR1, A2-HCDR2 and A2-HCDR3) and three light chain complementarity determining regions (A2-LCDR1, A2-LCDR2 and A2-LCDR3), wherein A2-HCDR1 comprises an amino acid sequence of SEQ ID NO: 20; A2-HCDR2 comprises an amino acid sequence of SEQ ID NO: 22; A2-HCDR3 comprises an amino acid sequence of SEQ ID NO: 24; A2-LCDR1 comprises an amino acid sequence of SEQ ID NO:12; A2-LCDR2 comprises an amino acid sequence of SEQ ID NO:14; and A2-LCDR3 comprises an amino acid sequence of SEQ ID NO: 16.

33. The bispecific antigen-binding molecule of claim **1**, wherein the second antigen-binding domain competes for binding to human HER2 with a reference antigen-binding protein comprising a heavy chain variable region (HCVR) comprising an amino acid sequence of SEQ ID NO:18, and a light chain variable region (LCVR) comprising an amino acid sequence of SEQ ID NO:10.

34. The bispecific antigen-binding molecule of claim **1**, wherein the first antigen-binding domain competes for binding to human APLP2 with a reference antigen-binding protein comprising three heavy chain complementarity determining regions (A1-HCDR1, A1-HCDR2 and A1-HCDR3) and three light chain complementarity determining regions (A1-LCDR1, A1-LCDR2 and A1-LCDR3), wherein A1-HCDR1 comprises an amino acid sequence selected from the group consisting of SEQ ID NOs28, 36, and 44; A1-HCDR2 comprises an amino acid sequence selected from the group consisting of SEQ ID NOs:30, 38 and 46; A1-HCDR3 comprises an amino acid sequence selected from the group consisting of SEQ ID NOs:32, 40, and 48; A1-LCDR1 comprises an amino acid sequence of SEQ ID NO:12; A1-LCDR2 comprises an amino acid sequence of SEQ ID NO:14; and A1-LCDR3 comprises an amino acid sequence of SEQ ID NO:16.

35. The bispecific antigen-binding molecule of claim **1**, wherein the first antigen-binding domain competes for binding to human APLP2 with a reference antigen-binding protein comprising a heavy chain variable region (HCVR) comprising an amino acid sequence selected from the group consisting of SEQ ID NOs:26, 34 and 42, and a light chain variable region (LCVR) comprising an amino acid sequence of SEQ ID NO:10.

36. The bispecific antigen-binding molecule of claim **1**, wherein the first antigen-binding domain competes for binding to human APLP2 with a reference antigen-binding protein comprising a heavy chain variable region (HCVR) comprising an amino acid sequence of SEQ ID NO:34, and a light chain variable region (LCVR) comprising an amino acid sequence of SEQ ID NO:10; and wherein the second antigen-binding domain competes for binding to human HER2 with a reference antigen-binding protein comprising a heavy chain variable region (HCVR) comprising an amino acid sequence of SEQ ID NO:18, and a light chain variable region (LCVR) comprising an amino acid of SEQ ID NO:10.

37. An antibody-drug conjugate (ADC) comprising the bispecific antigen-binding molecule of claim **1** and a cytotoxic agent, optionally wherein the bispecific antigen-binding molecule and the cytotoxic agent are covalently attached via a linker, optionally wherein the cytotoxic agent is a maytansinoid, optionally wherein the maytansinoid is DM1 or DM4, optionally wherein the linker is SMCC, and optionally wherein the cytotoxic agent is DM1 and the linker is SMCC.

38. An isolated anti-APLP2 antibody or antigen-binding fragment thereof, wherein the antibody or antigen-binding fragment thereof competes for binding to human APLP2 with a reference antibody comprising an HCVR/LCVR amino acid sequence pair as set forth in Table 2.

39. The anti-APLP2 antibody or antigen-binding fragment thereof of claim **38**, wherein the first antigen-binding domain binds human APLP2 with a KD of about 100 nM to about 1 μM, optionally wherein the first antigen-binding domain binds human APLP2 with a KD of about 100 nM to about 200 nM, optionally wherein the first antigen-binding domain binds human APLP2 with a KD of about 200 nM to about 800 nM, as measured by surface plasmon resonance, or equivalent assay, optionally wherein the first antigen-